JPL Briefing for Industry

Develop New Products Process

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JPL *5th*
Briefing for Industry

Develop New Products Process

Develop New Products Process Overview

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Develop New Products

5/23/00

Agenda

Develop
New
Products
(DNP)
Process

- What is DNP?

- Supporting New Projects

- Collaborative Opportunities

- Summary

What is DNP?

Develop New Products Mission

• Provide the processes, tools, facilities, and training to enable the efficient and successful execution of all the Lab's projects
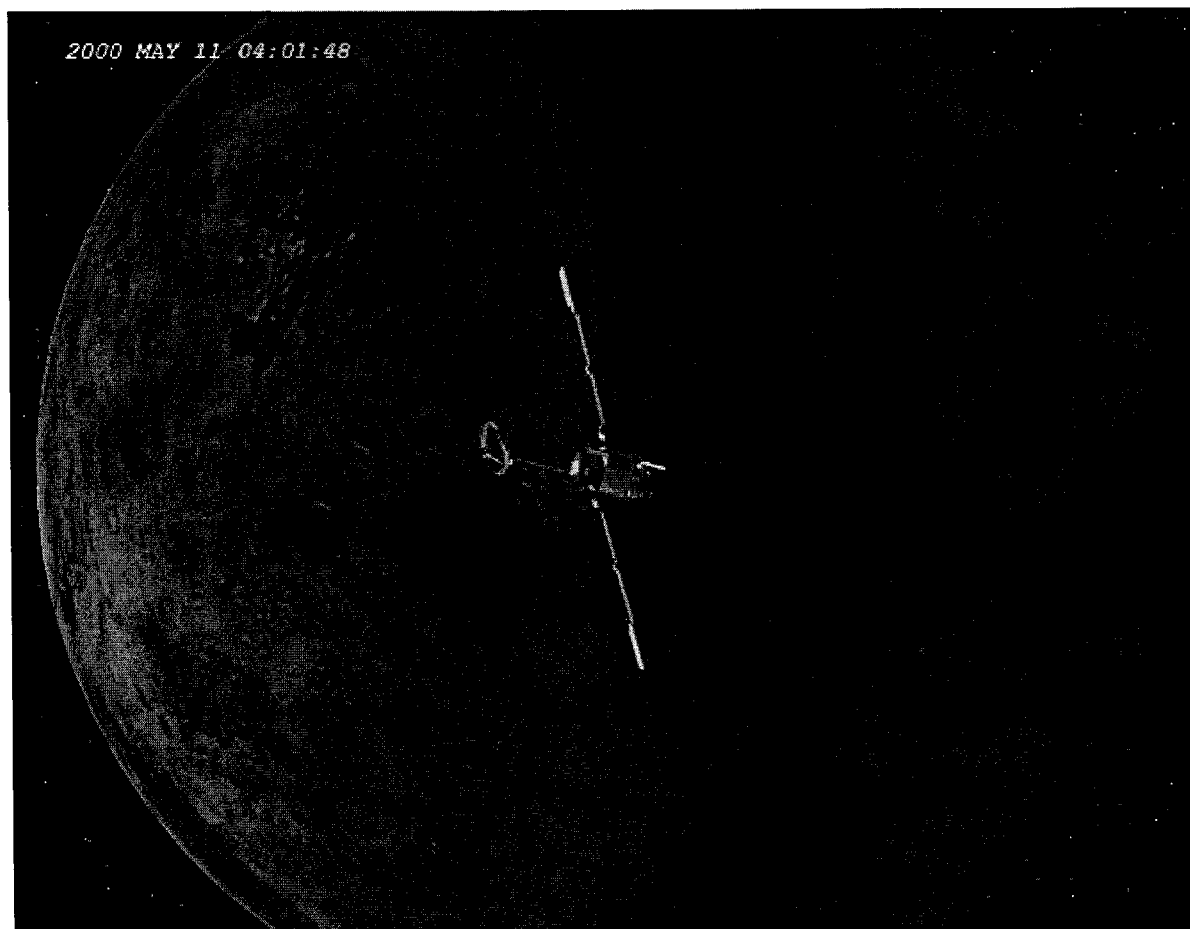
What Is DNP? (cont.'d)

Develop
New
Products
(DNP)
Process

DNP Process Roles

- Internal Re-engineering
  - Formed by the Laboratory's Executive Council to reduce project cycle-time and cost
  - Responding to changing laboratory (national) priorities and NASA requirements
  - Emphasizing product and process improvement
- Contributing to Mission Success by Supporting:
  - Study and proposals teams
  - New project and management teams
  - Engineers and technologists

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DNP-A4

Develop

New

Products

(DNP)

Process

View of MGS Spacecraft in Relation to Mars - UTC Spacecraft Time on Image

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DNP-A5

"We are opening up a new frontier on the Red Planet, and we can't afford to overlook anything... We have to make sure we plan it well, provide our people with the tools they need, and do whatever it takes to ensure the best possible chances for success."
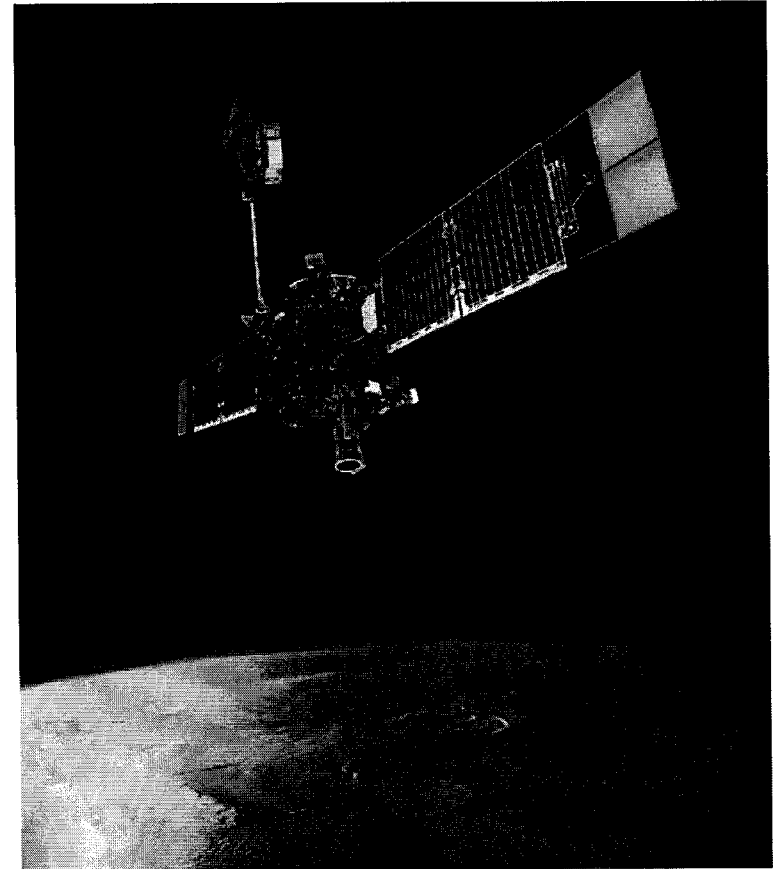
-- Dr. Edward J. Weiler
NASA's Associate Administrator for Space Science

Supporting New Projects (cont.'d)

Develop

New

Products

(DNP)

Process

DNP is currently supporting new projects in the areas of:

- Project Planning and Formulation
    - Preliminary definition, risk, cost and schedule
    - Requirements definition and management
    - Project reviews and product templates
    - Knowledge access (electronic libraries, team collaboration)
    - Management training (NASA Procedures & Guidelines 7120 compliance)
    - Established infrastructure support

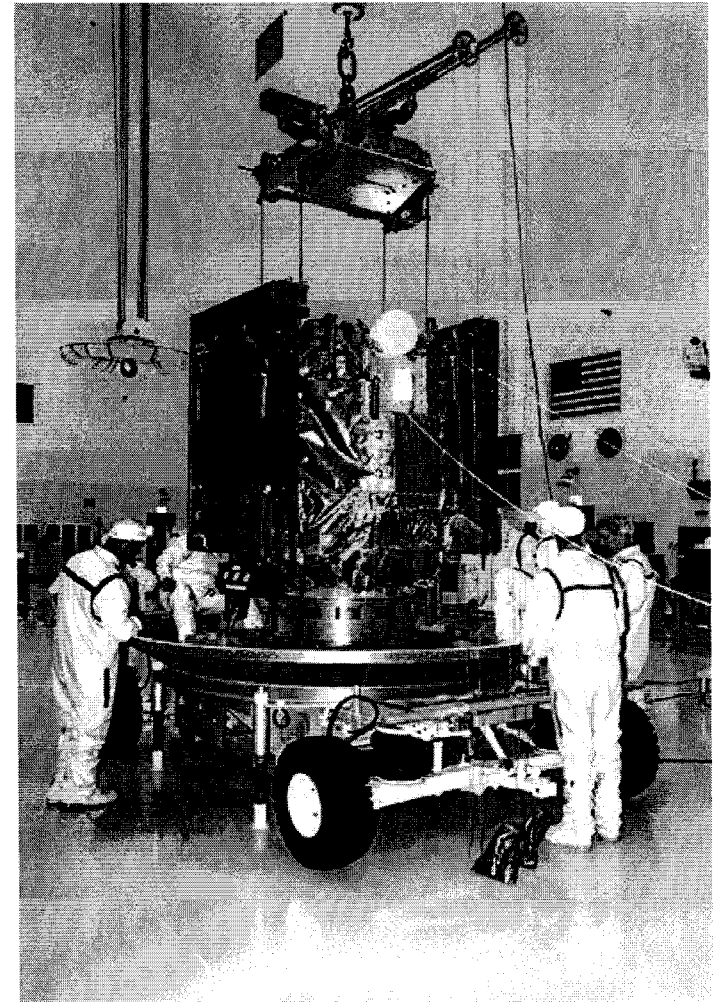*Artists rendering of Mars Global Surveyor over Olympus Mons*

Supporting New Projects (cont.'d)

Develop New Products (DNP) Process

DNP also supports new projects in the areas of:

- Engineering Tools and Services
  - Requirements Generation Process & Requirements Capture Tool (DOORS)
  - Mission visualization tools
  - Electrical, software, and mechanical CAD/CAE tool consolidation
  - Flight Hardware Logistics Program (Strategic Stockpile)
  - Electronic design using Verilog
  - On-site manufacturing with wire-EDM and 8-axis milling machines

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DNP-A7

Workers prepare DS1 for testing

Collaborative Opportunities

Working Together More *Effectively*

Develop
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- Business Sharing (NetMeeting, DocuShare)

- Requirements (DOORS)

- Mechanical Designs (Product Viewer)

- Mission Design Review Standard (FastFlight)

- Standard Data Exchange (**ST**andard for the **E**xchange of **P**roduct Model Information)

- Virtual Private Network (VPN)

Microsoft **Windows** Technologies
Windows
NetMeeting

DocuShare

DOORS

Product Viewer

STEP

FastFlight

VPNet

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DNP-A8

Summary

Develop
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Process

- DNP facilitates best practices for projects by providing the layer of efficient institutional processes, tools, and infrastructure

- DNP is looking for ways to work more effectively with partners and contractors

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